

THE MECHANICAL ENGINEERING DEPARTMENT MAINTAINS FABRICATION AND TESTING EQUIPMENT FOR STUDENTS AND RESEARCHERS. THESE RESOURCES ALLOW STUDENTS TO PUT INTO PRACTICE CONCEPTS LEARNED IN THE CLASSROOM.

#### **QUICK FACTS**

- The ME Prototype Shops serve users from over 30 UW departments.
- Users spent over 16,000 hours in the ME Prototype Shops during the 2016-2017 school year.
- The ME Prototype Shops are staffed by professional engineers, machinists, and technicians. The shop staff train users, keep equipment in working order, and consult on projects.
- In the ME Prototype Shops, users take their ideas through the entire process of design, prototyping, testing, and final production.
- Equipment available to users in the ME Prototype Shops includes 9 CNC machines, 2 load frames, 7 3D printers, and over 50 other machines.
- The ME Prototype Shop staff believe that people learn best by doing- whether the answers & skills they're seeking are for research or classwork.

#### MACHINE SHOP

In the ME Machine Shop, conversational mills, manual lathes, 3D printers, and hand tools are the workhorses of the beginner fleet. For more advanced users, the machine shop offers CNC mills and lathes, welding equipment, a sheet metal laser cutter, a waterjet cutter, and many other tools.

### MECHANICAL TEST LAB

The Mechanical Test Lab has facilities for quasistatic load testing, cyclic fatigue testing, and a drop tower for impact testing. Also available are a variety of extensometers, load cells, and grips.

#### **COMPOSITE SHOP**

The ME Composite Shop provides a space for layups and composite manufacturing equipment including an autoclave, heated platen press, and CNC ply cutter.







## **2018 RATES**

Category	UW Internal	External User	Outside Academic
Rates are per hour, unless otherwise noted. Internal users must use UW Budget Number			
Machine Shop	\$13	\$150	\$15
Composite Shop	\$8	\$50	\$10
Autoclave	\$6	\$65	\$7
Heated Platen Press	\$5	\$64	\$6
CNC Fabric Cutter	\$8	\$68	\$10
Large Oven	\$4	\$63	\$5
Semi Static Load Frame	\$25	\$144	\$28
Fatigue Frame	\$20	\$139	\$24
Drop Tower	\$30	\$150	\$15
Vacuum Bag Kit (per kit)	\$22	\$54	\$25
Strain Gauge Kit (per kit)	\$22	\$54	\$25
Lab Engineer/Staff Consulting	\$37	\$98	\$43

# **CONTACT ME SHOPS**



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**COMPOSITES SHOP:** 

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MECHANICAL TESTING:

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WWW.ME.WASHINGTON.EDU/SHOPS

